

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (currently amended) A method of accessing a shareable computer file, comprising:
generating private areas and stub files for a plurality of Virtual Private Servers (VPSs),
wherein ~~each VPS contains a group of processes of a common context and~~ the stub files of each
VPS correspond to the shareable computer file, and wherein each VPS operates as a fully
functional computer for providing services to users;

selecting a VPS for responding to a request to access the shareable computer file;

receiving, at [[a]] the VPS, [[a]] the request to access the shareable computer file;

retrieving, at [[a]] the selected VPS, a file ID based on a stub file corresponding to the
shareable computer file, wherein the file ID is a property of ~~references~~ the stub file, and wherein
the stub file is stored in a corresponding private area of ~~its~~ the selected VPS;

copying, ~~by the VPS,~~ the shareable computer file content into ~~to~~ the stub file if a user
attempts to modify the shareable computer file, and after looking up, by using the file ID, that the
file is a stub file, wherein any modifications are made to the copy;

accessing, inside the selected VPS, ~~based on the file ID,~~ the modified copy if
modifications have been made; and

accessing, by the selected VPS, based on the file ID, the shareable computer file if
modifications have not been made.

2. (original) The method of claim 1, further comprising creating a database that includes
information for deriving corresponding file names for a plurality of files.

3. (currently amended) The method of claim 2, further comprising retrieving [[a]] the
shareable computer file name from the database, wherein the shareable computer file name
corresponds to the file ID.

4. (canceled)

5. (original) The method of claim 2, further comprising creating a file tree for the shareable computer files.

6. (previously presented) The method of claim 2, wherein the database is provided by the operating system for use by the Virtual Private Server.

7. (canceled)

8. (original) The method of claim 2, wherein the operating system provides access to the database.

9. (previously presented) The method of claim 1, further comprising creating the stub file in a the private area of a the Virtual Private Server prior to the step of retrieving the file ID.

10. (original) The method of claim 1, wherein the modified copy of the shareable computer file includes only a portion of the shareable computer file that the user has attempted to modify.

11. (canceled)

12. (previously presented) The method of claim 1, further comprising installing restrictions on use of resources by each Virtual Private Server.

13. (currently amended) The method of claim 12, wherein the resources include:

disk quota; ~~and~~

file number quota;

disk I/O bandwidth quota; and

rate of opening files per unit time.

14. (previously presented) The method of claim 1, wherein the shareable computer file, if modifications have not been made, is shared on a disk between different instances of the Virtual Private Servers.

15. (previously presented) The method of claim 1, wherein the shareable computer file, if modifications have not been made, is shared in computer memory between different instances of the Virtual Private Servers.

16. (original) The method of claim 1, wherein the stub file includes a modified copy of the shareable computer file if the shareable computer file was attempted to be modified, and wherein the stub file refers to the shareable computer file if the user has not attempted to modify the shareable computer file.

17. (original) The method of claim 1, wherein, if the user has not attempted to modify the shareable computer file, a read-only operation retrieves any of file contents, file pointer position and file size from the shareable computer file.

18. (original) The method of claim 1, wherein, if the user has not attempted to modify content of the shareable computer file, the stub file is a zero size file.

19. (original) The method of claim 1, further comprising retrieving file attributes relating to the shareable computer file from the stub file.

20. (currently amended) A system for accessing a shareable computer file, comprising:
means for generating private areas and stub files for a plurality of Virtual Private Servers (VPSs), wherein ~~each VPS contains a group of processes of a common context~~ and the stub files

of each VPS correspond to the shareable computer file, and wherein each VPS operates as a fully functional computer for providing services to users;

means for selecting a VPS for responding to a request to access the shareable computer file;

means for receiving, at [[a]] the selected VPS, [[a]] the request to access the shareable computer file;

means for retrieving a file ID based on a stub file corresponding to the shareable computer file, wherein the file ID is a property of ~~references~~ the stub file, and wherein the stub file is stored in a corresponding private area of ~~its~~ the selected VPS;

means for copying, ~~by the VPS,~~ the shareable computer file content into ~~to~~ the stub file if a user attempts to modify the shareable computer file, and after looking up, by using the file ID, that the file is a stub file;

means for accessing, by the selected VPS, based on the file ID, the modified copy if modifications have been made; and

means for accessing, by the selected VPS, ~~based on the file ID,~~ the shareable computer file if modifications have not been made.

21. (currently amended) A computer ~~useable~~ readable medium having computer executable program logic stored thereon for executing on a processor for accessing a shareable computer file, the computer program logic comprising:

computer program code means for generating private areas and stub files for a plurality of Virtual Private Servers (VPSs), wherein ~~each VPS contains a group of processes of a common context and~~ the stub files of each VPS correspond to the shareable computer file, and wherein each VPS operates as a fully functional computer for providing services to users;

computer program code means for selecting a VPS for responding to a request to access the shareable computer file;

computer program code means for receiving, at [[a]] the selected VPS, [[a]] the request to access the shareable computer file;

computer program code means for retrieving, by the selected VPS, a file ID based on a stub file corresponding to the shareable computer file, wherein the file ID is a property of ~~references~~ the stub file, and wherein the stub file is stored in a corresponding private area of its VPS;

computer program code means for copying, ~~by the VPS,~~ the shareable computer file content into ~~to~~ the stub file if a user attempts to modify the shareable computer file, and after looking up, by using the file ID, that the file is a stub file;

computer program code means for accessing, by the selected VPS, based on the file ID, the modified copy if modifications have been made; and

computer program code means for accessing, by the selected VPS, ~~based on the file ID,~~ the shareable computer file if modifications have not been made.

22. (currently amended) A system for concurrent accessing of files by multiple users, comprising:

a plurality of Virtual Private Servers (VPSs) having private areas, wherein each VPS operates as a fully functional computer for providing services to users;

a plurality of shareable computer files maintained by the operating system;

a database including records with file IDs and information for deriving file names of the shareable computer files; and

a plurality of stub files for use by ~~a~~ the VPSs, wherein ~~each VPS contains a group of processes of a common context and~~ the stub files of each VPS correspond to the shareable computer file; and

wherein the file IDs are derivable from the stub files and correspond to those shareable computer files that a user has not attempted to modify,

wherein the file IDs reference the stub files such that the system determines, by looking up the file ID in the database, whether the file is a stub file,

wherein the stub files are stored in a corresponding private area of the corresponding VPS; and

wherein the stub files include modified contents of the shareable computer files for those shareable computer files that the user has attempted to modify.

23. (original) The system of claim 22, wherein the stub files include file attributes of corresponding shareable computer files.

24. (original) The system of claim 22, wherein, if the user has not modified a particular shareable computer file, a read-only operation to retrieve any of file position, file size and file contents retrieves them from the particular shareable computer file.

25. (original) The system of claim 22, wherein the database exists in operating system space.

26. (original) The system of claim 22, wherein the operating system provides access to the database.

27. (original) The system of claim 22, wherein the file name is stored in the database and corresponds to the file ID.

28. (original) The system of claim 22, wherein the database includes information for deriving the file name based on the file ID.

29. (original) The system of claim 22, further comprising a file tree for the shareable computer files.

30. (canceled)

31. (currently amended) The system of claim 22, wherein the database is provided by the operating system for use by the corresponding Virtual Private Server.

32. (original) The system of claim 22, wherein the modified copy of the shareable computer file includes only a portion of the shareable computer file that the user has attempted to modify.

33. (canceled)

34. (currently amended) The system of claim 22, wherein each Virtual Private Server includes restrictions on its use of system resources.

35. (original) The system of claim 34, wherein the system resources include disk quota and file number quota.

36. (currently amended) The system of claim 34, wherein the restrictions include ~~soft~~ flexible limits and ~~hard~~ fixed limits on the use of system resources.

37. (currently amended) The system of claim 36, wherein the ~~soft~~ flexible limits become ~~hard~~ fixed limits after a predetermined period of restriction violation.

38. (original) The system of claim 22, wherein the stub file includes a modified copy of the shareable computer file if the shareable computer file was attempted to be modified, and wherein the stub file refers to the shareable computer file if the user has not attempted to modify the shareable computer file.

39. (original) The system of claim 22, wherein, if the user has not attempted to modify the shareable computer file, a read-only operation retrieves any of file contents, file position and file size from the shareable computer file.

40. (original) The system of claim 22, wherein the stub files include file attributes relating to corresponding shareable computer files.

41. (new) The method of claim 1, further comprising removing correspondence between the file ID and the shared file if modifications have been made.